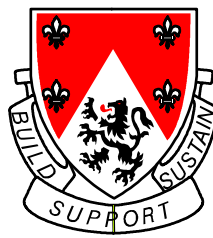
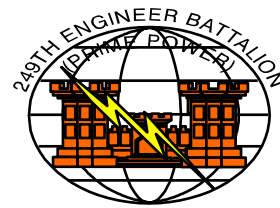


Introduction

Prime Power units provide continuity between power from tactical generators and commercial sources. They provide technical assistance and staff planning to support development of electrical power solutions for the full range of military operations. The Battalion's key operational element is the platoon below.



The 249th Engineer Battalion (Prime Power)

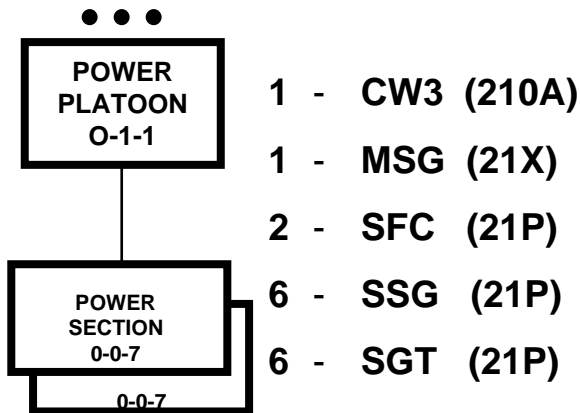


Power Planning Guide

FM 3-34.483 Engineer Prime Power Operations

USCENTCOM Reg 415-1 "Sand Book"

The Prime Power Platoon



Electrical Infrastructure Assessment During Combat Operations

Prime Power Soldiers provide rapid electrical infrastructure assessments during combat operations in developed terrain by:

1. Determining Source of electricity.
2. Understanding the distribution system.
3. Determining the load of the entire system.
4. Identifying the assets needed for making repairs to system.

For an AOR that has undergone damage from combat, Prime Power Soldiers:

1. Determine number of repair personnel, and available tools and equipment.
2. Determine electrical supplies to make repairs.
3. Translate technical requirements to contracting strategies.

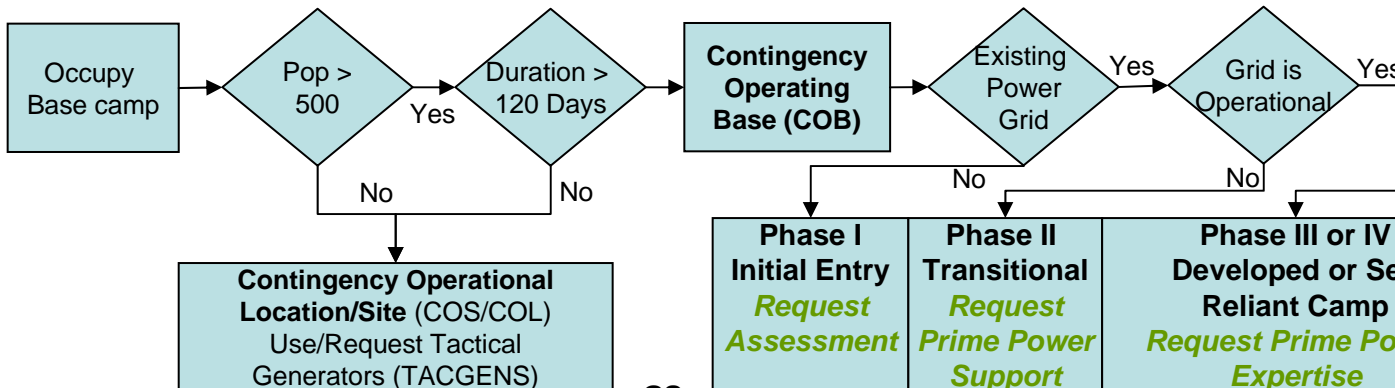
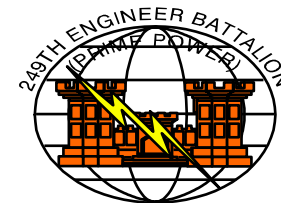
Supporting the Warfighter (Platoon Capabilities)

1. Provides Technical Assistance to staff by serving as the commander's electrical power subject matter expert.
2. Assesses current and future power needs.
3. Assesses and repairs existing power infrastructure including temporary, primary and secondary distribution systems (Grids).
4. Provides Power Contract Oversight through, Quality Assurance/Quality Control (QA/QC) and Contracting Officer Technical Representatives (COTR) for electrical service, O&M and plant construction contracts.
5. Provides deployable user level power with organic equipment.

Supporting Prime Power (Requirements)

1. Life support, Security
2. Site: 200' x 200' at grade, stable soil
3. Fuel: 5400 gal/day
4. Trans: 4 x 5T Trucks, 4 x 40' Trailers
5. MHE (may require 40T Crane and Forklift)
6. Trenching Assets
7. Funding for Dist System (\$10K/500 pers)
8. Maintenance for tactical vehicles (DS/GS)
9. Semi-Skilled Labor (augmentees)
10. Terrain and Weather Data

Power Planning & Evolution



Glossary of Major Power Terms

Tactical Power: Mobile Power Units used in combat operations

Prime Power: Continuous, reliable, commercial grade power produced by prime power generators

Commercial Power: Fixed, non-standard generation systems ranging from a few, to thousands of Megawatts

Load Survey: Analysis of Power Requirements

COTR: Contracting Officer's Technical Representative

QA/QC: Quality Assurance/ Control Transformation: Converting higher voltage to a user level

BOM: Bill of Materials, cables, transformers, kits, and other CLIV required for distribution system (order 120 days out)

Volt: Unit of Electrical Force

Amp: Unit of Electrical Current

Watt: Unit of Electrical Power

**BURIED CABLES CAN KILL!
CALL CJ7 BEFORE YOU DIG.**

